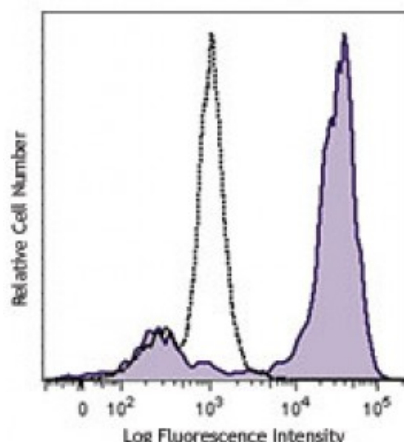


Brilliant Violet 421™ anti-mouse F4/80

Catalog # / Size:	1215660 / 500 µl 1215655 / 125 µl 1215685 / 50 µg
Clone:	BM8
Isotype:	Rat IgG2a, κ
Immunogen:	Murine macrophages
Reactivity:	Mouse
Preparation:	The antibody was purified by affinity chromatography and conjugated with Brilliant Violet 421™ under optimal conditions. The solution is free of unconjugated Brilliant Violet 421™ and unconjugated antibody.
Formulation:	Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide and BSA (origin USA).
Concentration:	microg sizes: 0.2 mg/ml microL sizes: lot-specific



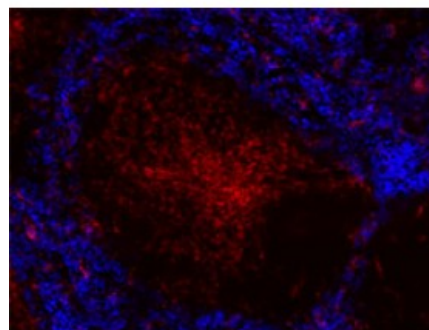
Thioglycolate-elicited Balb/c mouse peritoneal macrophages were stained with F4/80 (clone BM8) Brilliant Violet 421™ (filled histogram) or rat IgG2a, κ Brilliant Violet 421™ isotype control (open histogram).

Applications:

Applications:	Flow Cytometry
Recommended Usage:	Each lot of this antibody is quality control tested by immunofluorescent staining with flow cytometric analysis. For immunofluorescent staining using the microg size, the suggested use of this reagent is ≤0.25 microg per million cells in 100 microL volume. For immunofluorescent staining using microL sizes, the suggested use of this reagent is ≤5 microL per million cells or 5 microL per 100 microL of whole blood. For immunohistochemical staining on frozen tissue sections, the suggested use of this reagent is 2.0 microg/ml. It is recommended that the reagent be titrated for optimal performance for each application.

Brilliant Violet 421™ excites at 405 nm and emits at 421 nm. The standard bandpass filter 450/50 nm is recommended for detection. Brilliant Violet 421™ is a trademark of Sirigen Group Ltd.

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C57BL/6 mouse frozen spleen section was fixed with 4% paraformaldehyde (PFA) for ten minutes at room temperature and blocked with 5% FBS plus 5% rat/mouse serum for 30 minutes at room temperature. Then the section was stained with 2 microg/ml of anti-mo

the purchased product for research purposes only. This product may not be resold or incorporated in any manner into another product for resale. Any use for therapeutics or diagnostics is strictly prohibited. This product is covered by U.S. Patent(s), pending patent applications and foreign equivalents.

Application Notes: Additional reported applications (for the relevant formats) include: immunohistochemical staining of acetone-fixed frozen sections^{1,2} and formalin-fixed paraffin-embedded sections^{6,7}, and Western blotting.

Application References:

1. Schaller E, *et al.* 2002. *Mol. Cell. Biol.* 22:8035. (IHC)
2. Stevceva L, *et al.* 2001. *BMC Clin Pathol.* 1:3. (IHC)
3. Kobayashi M, *et al.* 2008. *J. Leukoc. Biol.* 83:1354. [PubMed](#)
4. Poeckel D, *et al.* 2009. *J. Biol Chem.* 284:21077. [PubMed](#)
5. Glass AM, *et al.* 2013. *J. Immunol.* 190:4830. [PubMed](#)
6. Koehm S, *et al.* 2007. *J. Allergy Clin. Immunol.* 120:570. (IHC)
7. Rankin AL, *et al.* 2010. *J. Immunol.* 184:1526. (IHC)
8. Sasi SP, *et al.* 2014. *J Biol Chem.* 289:14178. [PubMed](#)
9. Thakus VS, *et al.* 2014. *Toxicol Lett.* 230:322. [PubMed](#)
10. Karsten CM, *et al.* 2015. *J Immunol.* 194:1841. [PubMed](#)

Description: F4/80 is a 160 kD glycoprotein. It is characterized as a member of the epidermal growth factor (EGF)-transmembrane 7 (TM7) family. F4/80, also known as EMR1 or Ly71, has been widely used as a murine macrophage marker, which is expressed on the majority of tissue macrophages including peritoneal macrophages, macrophages in lung, gut, thymus and red pulp of spleen (but not on the macrophages located in T cell areas of the spleen, lymph node and Peyer's patch), Kuffer cells, Langerhans cells, and bone marrow stromal cells. F4/80 has also been shown on a subset of dendritic cells. The biological ligand of F4/80 has not been identified, but it has been reported that F4/80 is required for induction of CD8⁺ T cells-mediated peripheral tolerance.

Antigen References:

1. Austy JM and Gordon S. 1981. *Eur. J. Immunol.* 11:805.
2. Hume DA, *et al.* 1983. *J. Exp. Med.* 158:1522.
3. Ruedl C, *et al.* 1996. *Eur. J. Immunol.* 26:1801.
4. McKnight AJ, *et al.* 1996